DOCKET NO.: CARP0015-100 PATENT

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of: Frank Grosveld Confirmation No.: 1498

Serial No.: 10/693,308 Group Art Unit: 1621

Filing Date: October 24, 2003 Examiner: Anoop K. Singh

For: IMMUNOGLOBULIN 2

Customer No.: 34132

EXPRESS MAIL LABEL NO: EV513558352US DATE OF DEPOSIT: October 19, 2006

### MAIL STOP AMENDMENT

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

#### SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Pursuant to 37 C.F.R. §§ 1.56 and in accordance with 37 C.F.R. §§ 1.97 and 1.98, information relating to the above-identified application is hereby disclosed, the Examiner in charge of the above-identified application is requested to consider and make of record the references listed on the PTO Forms SB/08A and SB/08B, formerly known as PTO Form 1449 submitted herewith.

Inclusion of the information submitted herewith is not to be construed as an admission that the information is material as that term is defined in 37 C.F.R. § 1.56(b).

In accordance with 37 C.F.R. § 1.97(g), the filing of this Supplemental Information Disclosure Statement shall not be construed to mean that a search has been made.

This S	This Supplemental Information Disclosure Statement is being filed:					
	within three months of the filing date of the patent application.					
	within three months of the date of entry into the national stage as set forth in					
	37 C.F.R. § 1.491 of the international application.					
	before the mailing date of a first Office Action on the merits.					

$\boxtimes$	after	the mailing date of a first Office Action on the merits, but before the				
	maili	mailing date of a Final Office Action under 37 C.F.R. § 1.116 or a Notice of				
	Allov	wance under 37 C.F.R. § 1.311, and accordingly is accompanied by:				
		the Statement under 37 C.F.R. § 1.97(e) (see "Statement" below);				
		or				
	$\boxtimes$	the Fee of \$180.00 set forth in 37 C.F.R. § 1.17(p); or				
		No fee is owed by the applicant(s).				
	In ac	cordance with 37 C.F.R. § 1.129(a), this Supplemental Information				
	Discl	osure Statement is being filed in connection with the first or				
	secor	nd After Final Submission, and accordingly is accompanied by the				
	State	ment under 37 C.F.R. § 1.97(e) (see "Statement" below) and the fee of				
	\$180	.00 as set forth in 37 C.F.R. § 1.17(p), is attached.				
	after the mailing date of a Final Office Action under 37 C.F.R. § 1.116 or a Notice of Allowance under 37 C.F.R. § 1.311, but before the payment of the Issue Fee, and accordingly is accompanied by the Statement under 37 C.F.R. § 1.97(e), (see "Statement," and "Fees" below).					
$\boxtimes$	Copies of the references listed on the attached PTO Forms SB/08a and SB/08b, formerly known as PTO Form 1449 are enclosed.					
	EXCEPT THAT:					
		In view of the voluminous nature of reference, and the likelihood that this reference is available to the Examiner, a copy is not enclosed herewith.				
		In accordance with 37 C.F.R. § 1.98(d), copies of the following references listed on the attached PTO Form SB/08A and PTO Form SB/08B, formerly known as PTO Form 1449 are not enclosed herewith because they were previously cited by or submitted to the U.S. Patent and Trademark Office in patent application(s) for which a claim for priority under 35 U.S.C. § 120 have been made in the instant				
		application.				

			If the foregoing publication is not available to the Examiner, Applicant will endeavor to supply a copy at the Examiner's request.
	Staten	nent un	nder 37 C.F.R. § 1.97(e)
		in the scommon applications	Supplemental Information Disclosure Statement was cited in a unication from a foreign patent office in a counterpart foreign patent ation not more than three months prior to the filing of the Supplemental nation Disclosure Statement.
	Fees		
		No Fee	e is owed by the applicant(s).
	$\boxtimes$		upplemental Information Disclosure Statement Fee of \$180.00 under 37. § 1.17(p) is enclosed herewith.
	Metho	od of Pa	ayment of Fees
			ned is a check in the amount of \$ This form is tted in duplicate.
	$\boxtimes$	_	e Deposit Account No. 50-1275 in the amount of \$180.00. This form is tted in duplicate.
	$\boxtimes$	Please	charge any deficiency or credit any overpayment to Deposit Account
			Respectfully submitted,  Note of Statement is required under 37 C.F.R. § 1.97(b).  Respectfully submitted,  Doreen Yatko (Trujillo Registration No. 35,719
Dated:		w	<u>w 1,000</u>

COZEN O'CONNOR, P.C. 1900 Market Street, 5<sup>th</sup> Floor Philadelphia, PA 19103-3508 (215) 665-5593 - Telephone (215) 665-2005 - Facsimile

PTO/SB/08A (07-06)

Approved for use through 09/30/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

OCT 19 2006

Sheet

# Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

2

	`	
Application Number	10/693,308	
Filing Date	October 24, 2003	
First Named Inventor	Grosveld	
Art Unit	1632	
Examiner Name	Singh	
Attorney Docket Number	CARP0015-100	

	U.S. PATENT DOCUMENTS						
Examiner	Cite No.1	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant		
Initials *	No.'	Number - Kind Code <sup>2</sup> (if known)	IVIIVI-DD-T1TT		Figures Appear		
•		US-					
		US-					
		US-					
		US-					
		US-					
		US-					
		US-					
		US-					
		US-					
		US-					
		US-					
		US-					
		US-					
		US-					
		US-	}				
		US-					
		US-					
		US-					
		US-					
		US-					

	FOREIGN PATENT DOCUMENTS						
Examiner Cite		Foreign Patent Document	Publication	Name of Patentee or	Pages, Columns, Lines, Where Relevant		
Initials*	No.1	Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (if known)	Date MM-DD-YYYY	Applicant of Cited Document	Passages or Relevant Figures Appear	T <sup>6</sup>	
	G	WO 03/000737 - A2	01-03- 1993	Babraham Inst.			
	Н	WO 2004/049794 - A3	06-17- 2004	Babraham Inst.			
	<del> </del> -						
	-						

Examiner Signature	Date Considered	

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. Applicant is to place a check mark here if English language

Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO/SB/08B(07-06)

Approved for use through 09/30/2006. OMB 0651-0031 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Complete if Known

October 24, 2003

10/693,308

Grosveld

Under the Hebrework Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Application Number

First Named Inventor

Attorney Docket Number

Filing Date

Sheet

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

of 2

1632 Art Unit (Use as many sheets as necessary) Singh Examiner Name CARP0015-100

		NON PATENT LITERATURE DOCUMENTS					
Examiner Initials *	Cite No.1						
	ı	DAVIES AND RIECHMANN, "Antibody VH Domains as Small Recognition Units," Biotechnology, 1995, v. 13, 475-479					
	J	DAVIES AND RIECHMANN, "Affinity improvement of single antibdoy VH domains: residues in all three hypervariable regions affect antigen binding," Immunotechnology 2, 1996, 169-179					
-· <del>-</del>	К	GROSVELD ET AL, "Position-Independent, High-Level Expression of the Human [Beta]-Globin Gene in Transgenic Mice, Cell, December 24, 1987, v. 51, 975-985					
	L	JANSSESNS ET AL, "Generation of heavy-chain-only antibodies in mice," PNAS, October 10, 2006, v. 103, no. 41, 15130-15135 and supplementary material on-line					
	М	LI ET AL, "Locus Control Regions coming of age at a decade plus," TIG, October 1999, v. 15, no. 10, 403-408					
	N	SITIA ET AL, "Developmental Regulation of IgM Secretion: The Role of the Carboxy-Terminal Cysteine," Cell, March 9, 1990, v. 60, 781-790					
	0	SPINELLI ET AL, "The crystal structure of a llama heavy chain variable domain," Nature Structural Biology, September, 1996, v. 3, no. 9, 752-757					
	Р	WARD ET AL, "Binding activiities of a repertoire of single immunoglobulin variable domains secreted from Escherichia coli," Nature, October 12, 1989, v. 341, 544-546					

_		 	
	Examiner	Date	
1	Signature	Considered	

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance

and not considered. Include copy of this form with next communication to applicant.

Applicant's unique citation designation number (optional). Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.